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(54) Title: MICROFABRICATED, FLOWTHROUGH POROUS APPARATUS FOR DISCRETE DETECTION OF BINDING REACTIONS

## (57) Abstract

An improved microfabricated apparatus for conducting a multiplicity of individual and simultaneous binding reactions is described. The apparatus comprises a substrate on which are located discrete and isolated sites for binding reactions. The apparatus is characterized by discrete and isolated regions that extend through said substrate and terminate on a second surface thereof such that when a test sample is allowed to the substrate, it is capable of penetrating through each such region during the course of said binding reaction. The apparatus is especially useful for sequencing by hybridization of DNA molecules.

